WILTSHIRE & GRANNIS LLP

May 12, 2011

Ex Parte

Ms. Marlene Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, DC 20554

Re: *Ex parte* notice—WT Docket No. 11-18; RM-11592

Dear Ms. Dortch:

On May 11, 2011, Dean Brenner, John Kuzin, Siddharth Mohan and Badai Mansunath of QUALCOMM Incorporated ("Qualcomm"), Bob Quinn, Jeanine Poltronieri, Michael Goggin, Linda Vandeloop, and Neeti Tandon of AT&T Mobility Spectrum LLC ("AT&T"), Paul Margie and Renee Wentzel of Wiltshire & Grannis LLP, on behalf of Qualcomm, and William Cook of Arnold & Porter LLP, on behalf of AT&T, met with Matt Nodine, Elizabeth Lyle, Paul Murray, Jim Schlichting, Tom Derenge, Moslem Sawez and Lloyd Coward of the FCC's Wireless Telecommunications Bureau, and Michael Ha, Walter Johnston, Martin Doczkat and Ira Keltz of the FCC's Office of Engineering and Technology at the AT&T Innovation Center in Washington, DC.

During the meeting Qualcomm demonstrated supplemental downlink technology to the FCC staff. Qualcomm showed that supplemental downlink supports faster downloads and more users than today's mobile broadband networks can deliver.

Qualcomm and AT&T noted that supplemental downlink technology permits the bonding of non-contiguous spectrum, including unpaired spectrum, into a single wider channel. Supplemental downlink will help to address the asymmetry of data flow that results from the fact that wireless broadband users currently consume far more downlink than uplink capacity. Supplemental downlink greatly improves performance by enabling faster download speeds and supporting a greater number of users than can otherwise be supported in a mobile network using paired spectrum. The result of the innovations enabled by supplemental downlink is a greatly enhanced user experience.

As referenced in the AT&T/Qualcomm public interest filing with respect to AT&T's proposed acquisition of Qualcomm's Lower 700 MHz D and E block spectrum ("Qualcomm Spectrum"), AT&T intends to employ supplemental downlink technology to integrate the

Qualcomm Spectrum into its nationwide LTE network using carrier aggregation technology.[1] Supplemental downlink will make it possible to bond the unpaired Qualcomm Spectrum with the paired spectrum AT&T will use in its LTE network. During the demonstration, Qualcomm also explained the fact that deployment of supplemental downlink will require new handsets with an additional chip, various network infrastructure changes, and approval of an LTE Advanced standard and associated spectrum combinations for supplemental downlink. As a result, Qualcomm stated that AT&T did not anticipate it would be able to roll out handsets utilizing supplemental downlink technology until 2014 at the earliest. Finally, Qualcomm explained that results in a deployed system may differ from the results in the demonstration, depending on a number of variables, including user profiles.

Qualcomm also highlighted that deployment of supplemental downlink technology on the Lower D and E block (in geographic areas where the E block licenses are transferred to AT&T) will result in the mitigation of certain interference issues in the Lower 700 MHz band. It will replace higher power broadcast operations on the Qualcomm Spectrum, which are not compatible with the cellular operations on the adjacent Lower A, B and C blocks, with more compatible supplemental downlink.

Finally, during the demonstration, Qualcomm emphasized that while the eventual deployment of supplemental downlink technology on the Qualcomm Spectrum will be highly beneficial for consumers for the reasons stated herein and in the attached slides, the deployment will not solve the spectrum crunch. Resolving the spectrum crisis will require the allocation of substantial amounts of additional spectrum for commercial mobile wireless services, as indicated in the Commission's National Broadband Plan.

Enclosed with this filing are the slides that Qualcomm presented at the demonstration. Should you have any questions, please contact the undersigned.

Sincerely,

/s/

Paul Margie
Counsel to QUALCOMM Incorporated

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[1] *See In re Application of Qualcomm Incorporated and AT&T Mobility Spectrum LLC for Consent to the Assignment of Lower 700 MHz Band Licenses*, AT&T Mobility Spectrum, Description of Transaction, Public Interest Showing and Related Demonstrations, DA 11-252, WT Docket No. 11-18, ULS File No. 0004566825 (filed Jan. 13, 2011).

cc: Matt Nodine
Elizabeth Lyle
Paul Murray
Jim Schlichting
Tom Derenge
Moslem Sawez
Lloyd Coward
Michael Ha
Walter Johnston
Martin Doczkat
Ira Keltz